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09/829,564	04/10/2001	Ralf Schaefer	450117-03193	7746

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FROMMER LAWRENCE & HAUG
745 FIFTH AVENUE- 10TH FL.
NEW YORK, NY 10151

EXAMINER	
PATEL, ASHOKKUMAR B	

ART UNIT	PAPER NUMBER
2154	

DATE MAILED: 01/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

SP

Office Action Summary	Application No.	Applicant(s)	
	09/829,564	SCHAEFER ET AL.	
	Examiner	Art Unit	
	Ashok B. Patel	2154	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 October 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-55* is/are pending in the application.

4a) Of the above claim(s) *1-25* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *26-55* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-55 are subject to examination. Claims 1-25 have been cancelled.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/14/2005 has been entered.

Response to Arguments

3. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 30 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

6. The terms "on average" and "likely to change" in claim 30 are relative terms which renders the claim indefinite. The terms "on average" and "likely to change" are not defined by the claim, the specification does not provide a standard for ascertaining

the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 26-55 are rejected under 35 U.S.C. 102(e) as being anticipated by Rinne (US 5, 946, 326).

Referring to claim 26,

Rinne teaches a method for transmitting an information service in a broadcast transmission system (Abstract), comprising the following steps:

performing a fragmentation within each of categories representing said information service to create data fragments (col. 6, line 1-13," As an example of the use of the invention the transmission of a newspaper should be mentioned. A page of the newspaper is divided into files in the desired manner. Each picture forms a file of its own and the text ensembles or their parts files of their own. The page can also be gridded into blocks that form a file. By using the descriptions according to the invention the pages can be reproduced as complete at the reception end as each file is defined both with respect to its contents and with respect to other files both temporally and

locally. In accordance with the profile the receiver creates, he/she can view only the pictures, specified texts, e.g. sports pages.),

adding signalling information to every data fragment, which signalling information allows a consistent reassembly of said data fragments at a receiver on basis of predefined protocol rules, to create respective broadcast objects, and transmitting said broadcast objects in an order according to an information content of said data fragment within said broadcast object, (col. 3, line 24-34," In accordance with the invention, the service is divided into files at the transmission end. A service ensemble is formed by the mutual parallel and successive presentation of the files in time and spatial domain. A parameter group called a message type is associated with each file. There are four message types: 1) file transfer description, 2) file content description, 3) file presentation description, and 4) file execution description."), and

wherein a broadcast object is classified in dependency on the information content of the data fragment carried within said broadcast object, and a repetition rate of transmitting a broadcast object is dependent on its type. (col. 5, line 47-67, "Table 1 shows some possible parameters of a file transfer description. In addition to these it may also contain other parameters that can be classified into the same category. Table 2 shows some possible parameters of a file content description. This description may also contain other parameters that can be classified into the same category. Table 3 shows some possible parameters of a file presentation description. The description may also contain other parameters that can be classified into the same category. This category especially comprises the location of the file in time and spatial domain for the

presentation, the conditions triggering the file presentation, that is, dependencies on other presentations, the definitions of the resource channel and the links of the file to other files and media components. Table 4 shows some possible parameters of a file execution description. The description may also contain other parameters that can be classified into the same category. This is true if the file itself is a file to be executed, but it is also true as an execution instruction for the executing program if the described file is the control file of the program to be executed.", col. 6, 7, and 8, Tables 1-4)

Referring to claim 27,

Rinne teaches the method according to claim 26, wherein said fragmentation is performed dependent on the information content of the data to be transmitted. (col. 3, line 24-34, col. 6, 7, and 8, Tables 1-4)

Referring to claim 28,

Rinne teaches the method according to claim 26, wherein said information service comprises a structure with three layers, namely: service which provides information considered useful for a user when choosing a service among several others(col. 5, line 46-48, "Table 2 shows some possible parameters of a file content description. This description may also contain other parameters that can be classified into the same category.); category which links several items (col. 5, line 50-52, "Table 3 shows some possible parameters of a file presentation description. The description may also contain other parameters that can be classified into the same category. This category especially comprises the location of the file in time and spatial domain for the presentation, the conditions triggering the file presentation, that is, dependencies on

other presentations, the definitions of the resource channel and the links of the file to other files and media components."), and item which carries the information the user is interested in. (col. 6, line 1-13)

Referring to claims 29 and 30,

Rinne teaches the method according to claim 26, wherein said fragmentation divides category horizontally in at least two groups by building groups of item attributes of items of said category according to an importance of said item attributes, and the method according to claim 29, wherein four groups of item attributes are built, namely: a core attributes group which covers a set of the most important attributes, which should be available in a terminal first on average; a dynamic attributes group which are likely to change with a higher frequency than other attributes; a main attributes group which covers all remaining item attributes: and a referenced attributes group which comprises attributes belonging to one of the other three attribute groups which are included therein as reference only and to be transmitted separately. (col. 6, line 1-27, col. 5, line 25-38).

Referring to claims 31 and 32,

Rinne teaches the method according to claim 30, wherein six types of broadcast objects are defined, namely: service directory containing elementary information about a service; category directory containing a complete list of all categories within a service; item directory containing all core attributes of all items of a category; item dynamic data list containing the dynamic attributes of at least a group of items; item main data list containing the main attributes of at least a group of items; and referenced attributes containing one referenced attribute of one item, and the method according to claim 31,

wherein the signalling information of a service directory broadcast object comprises a protocol version attribute to enable a receiving terminal to check protocol compatibility between the broadcast service and a processing unit in the terminal (col. 6, 7, and 8, Tables 1-4).

Referring to claim 33,

Rinne teaches the method according to claim 31, wherein a reference to a referenced attribute comprises the ID of the broadcast object carrying the referenced attribute and a version attribute of the referenced broadcast object. (col. 6, 7, and 8, Tables 1-4).

Referring to claim 34,

Rinne teaches the method according to claim 33, wherein in case of an update of a referenced attribute the version attribute of the referenced attribute object and the version of the attribute reference change, or the reference changes by exchanging the identifier and using the version information of the newly referenced attribute. (col. 6, 7, and 8, Tables 1-4).

Referring to claim 35,

Rinne teaches the method according to claim 31, wherein the item directory comprises a version attribute which indicates an update whenever an item set comprising all core attributes of all items of a category changes or the vertical fragmentation changes. (col. 6, 7, and 8, Tables 1-4).

Referring to claim 36,

Rinne teaches the method according to claim 31, wherein the item main data list and the item dynamic data list respectively comprise a version attribute which indicates an

update whenever a respective item subset comprising the respective main or dynamic attributes of at least a group of items changes or the vertical fragmentation changes. (col. 6, 7, and 8, Tables 1-4).

Referring to claim 37,

Rinne teaches the method according to claim 31, wherein the category comprises a version attribute which indicates an update whenever a category attribute value or a category attribute cardinality changes. (col. 6, 7, and 8, Tables 1-4).

Referring to claims 38 and 39,

Rinne teaches the method according to claim 31, wherein the category directory comprises a version attribute which indicates an update whenever a category set comprising a compete list of all categories within a service changes, and the method according to claim 31, wherein the service directory comprises a version attribute which indicates an update whenever the protocol version attribute or a service attribute changes. (col. 6, line 14-27,"As the invention especially relates to the new digital audio system DAB, it may be assumed that the production numbers of the system and the equipment will be great. In connection with DAB, the data services and the mechanisms required by them are mostly unspecified. There is therefore a need for transmitting multimedia and hypermedia type of services to a mobile user. Different combinations of picture, voice and data services can be employed in numerous applications. Examples of these services could be a picture index of the yellow pages, petrol station catalogues, passenger information lists and hotel and restaurant directories. Other applications could be newspapers and comics, video

announcements, advertisements and entertainment services.", col. 6, 7, and 8, Tables 1-4)

Referring to claims 40 and 41,

Rinne teaches the method according to claim 30, wherein the item core attributes group, the item main attributes group and the item dynamic attributes group each comprise an own version attribute which indicates an information update whenever an item attribute value or an item attribute cardinality of the respective item attributes group changes, and the method according to claim 40, wherein a broadcast object comprising an item of the item core attributes group and of the item directory carries all three version attributes, a broadcast object comprising an item of the item main attributes group carries a main version attribute, and a broadcast object comprising an item of the item dynamic attributes group carries a dynamic version attribute. (col. 6, 7, and 8, Tables 1-4)

Referring to claims 42 and 43,

Rinne teaches the method according to claim 26, wherein said fragmentation divides at least parts of a category vertically by building groups of items of said category according to a logical membership of said items, and the method according to claim 42, wherein two types of broadcast objects are defined, namely: item subset directory containing information about all items which are transmitted in a predefined format; and
item subset containing item data of a predefined format. (col. 6, 7, and 8, Tables 1-4)

Referring to claim 44,

Rinne teaches the method according to claim 26, wherein the signalling information of a

broadcast object comprises a type attribute indicating a classification of said broadcast object, and/or an ID attribute to distinguish several broadcast objects of a same type of broadcast objects, and/or a version attribute to indicate a change of a certain broadcast object. (col. 3, line 20-33)

Referring to claim 45,

Rinne teaches the method according to claim 26, wherein the signalling information of a broadcast object carrying a fragment of a category comprises a category ID attribute which specifies uniquely an information category and attributes which allow the defragmentation of the category. (col. 3, line 20-33)

Referring to claim 46,

Rinne teaches the method according to claim 26, wherein said broadcast transmission system is DAB. (col. 6, line 14-27).

Referring to claim 47,

Rinne teaches a method for receiving an information service in a broadcast transmission system, characterized by the following steps: receiving broadcast objects; extracting signalling information and a data fragment of every received broadcast object, which signalling information allows a consistent reassembly of said data fragments into an information category of said information service on basis of predefined protocol rules; and performing a defragmentation within each of categories representing said information service to create said information service. (col. 6, line 1-13, col. 4, line 51 through col. 5, line 24)

Referring to claim 48,

Rinne teaches the method according to claim 47, wherein said defragmentation is performed dependent on the information content of said extracted data fragments. (col. 6, line 1-13, col. 4, line 51 through col. 5, line 24)

Referring to claim 49,

Rinne teaches a receiver to receive. an information service in a broadcast transmission system, comprising: means for receiving broadcast objects (Abstract) ;

means for extracting signalling information and a data fragment of every received broadcast object, which signalling information allows a consistent reassembly of said data fragments into an information category of said information service on basis of predefined protocol rules; and means for performing a defragmentation within each of categories representing said information service to create said information service. (col. 4, line 16-33)

Referring to claim 50,

Rinne teaches a method for fragmenting and transmitting an information service in a broadcast transmission system (Abstract), said information service having a logical structure comprising one or more information categories representative of said information service as well as, for each of said information categories, one or more items representative of the respective information category, and said information service comprising, for each of said information categories, one or more information category data units respectively associated therewith as well as, for each of said items, one or more item data units associated with the respective item and a respective one of said categories (col. 3, line 20-33), said method comprising the following steps:

grouping, with respect to each of said information categories representing said information service, the item data units associated with the respective information category into a plurality of data fragments respectively comprising one or more of said item data units; adding, to each of said data fragments so as to create respective broadcast objects,(col. 6, 7, and 8, Tables 1-4)

signalling information that allows a consistent reassembly of said data fragments at a receiver on the basis of predefined protocol rules; determining a transmission order for said broadcast objects on the basis of an information content of the data fragment within the respective broadcast object; and transmitting said broadcast objects in said transmission order. (col. 3, line 20-33)

Referring to claims 51 and 52,

Rinne teaches the method according to claim 50, wherein each of said information category data units comprises information representative of one or more aspects of said respective information category, and the method according to claim 50, wherein each of said item data units comprises information representative of one or more aspects of said respective item. (col. 6, 7, and 8, Tables 1-4, col. 6, line 1-27)

Referring to claim 53,

Rinne teaches a method for receiving and reassembling an information service in a broadcast transmission system (Abstract), said information service having a logical structure comprising one or more information categories representative of said information service as well as, for each of said information categories, one or more items representative of the respective information category, and said information service

comprising, for each of said information categories, information category data respectively associated therewith as well as, for each of said items, one or more item data units associated with the respective item and a respective one of said categories (col. 3, line 20-33),, said method comprising the following steps:

receiving a plurality of broadcast objects, each comprising signalling information and a data fragment, which signalling information allows a consistent reassembly of said data fragments into an information category of said information service on the basis of predefined protocol rules, and which data fragment comprises a group of one or more of said item data units associated with a respective one of said information categories representing said information service; (col. 6, line 1-27)

extracting said signalling information and said data fragment from each of said received broadcast objects; and reassembling, with regard to one or more of said categories representing said information service, the data fragments associated therewith on the basis of the respective signalling information. (col. 6, 7, and 8, Tables 1-4, col. 6, line 1-27).

Referring to claim 54,

Claim 54 is a claim to a broadcast transmission system that carries out the method of claim 50. Therefore claim 54 is rejected for the reasons set forth for claim 50.

Referring to claim 55,

Claim 55 is a claim to a broadcast transmission system that carries out the method of claim 53. Therefore claim 55 is rejected for the reasons set forth for claim 53.

Conclusion

Examiner's note: Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ashok B. Patel whose telephone number is (571) 272-3972. The examiner can normally be reached on 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John A. Follansbee can be reached on (571) 272-3964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Abp
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JOHN FOLLANSBEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100